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COMMISSION

A. My name is Allen W. Rooks. My business address is 1426 Main Street, Columbia, South Carolina. I am Supervisor of Electric Pricing and Rate Administration at SCANA Services, Inc.

**Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.**

A. I graduated from the University of South Carolina with a Bachelor of Science Degree in Business Administration with a major in Management Science (May, 1995). In May 2002, I also completed a Master of Business Administration Degree at U.S.C. Since joining SCANA Corporation on a full-time basis in July, 1996, I have held analytical positions within the Rates & Regulatory and Financial Planning Departments. I have participated in cost of service studies, rate development and design, financial planning and budgeting, rate surveys, responses to regulatory information requests, and rate evaluation programs primarily for the Company's electric operations. I assumed my present position in July of 2007.

1 **Q. WILL YOU BRIEFLY SUMMARIZE YOUR DUTIES WITH SOUTH**  
2 **CAROLINA ELECTRIC & GAS COMPANY (“SCE&G” OR**  
3 **“COMPANY”)?**

4 A. I am responsible for designing and administering the Company’s  
5 electric rates and tariffs to comply with regulatory orders and relevant state  
6 statutes. Calculation of the Electric Adjustment for Fuel Cost is an essential  
7 part of my responsibilities.

8 **Q. IS THIS YOUR FIRST TIME PRESENTING TESTIMONY BEFORE**  
9 **THIS COMMISSION?**

10 A. Yes, it is.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
12 **PROCEEDING?**

13 A. The purpose of my testimony is to provide the actual fuel cost data for  
14 the period February 1, 2007 through January 31, 2008, the historical period  
15 under review in this proceeding. I will also provide the computations for the  
16 projected fuel cost per kilowatt-hour of sales for the period of February  
17 through April 2008 and for May 1, 2008 through April 30, 2009, along with  
18 the Company’s recommended fuel cost factor (also referred to as the base rate  
19 for fuel cost) (“Fuel Cost Factor”) for the twelve-month period ending April  
20 2009.

21 **Q. WHAT IS THE COMPANY’S CURRENTLY APPROVED FUEL COST**  
22 **FACTOR?**

1 A. In order No. 2007-257, the Commission approved SCE&G's current  
2 Fuel Cost Factor of 2.630 cents per KWH.

3 **Q. PLEASE DESCRIBE THE CHANGES THAT HAVE BEEN MADE TO**  
4 **THE SOUTH CAROLINA FUEL COST RECOVERY STATUTE SINCE**  
5 **THE LAST FUEL COST PROCEEDING.**

6 A. In 2007, the General Assembly approved certain amendments to the  
7 Fuel Cost Recovery Statute (codified at S.C. Code Ann. §58-27-865) directing  
8 that certain variable environmental costs "be recovered as a component of fuel  
9 cost". Specifically, "(a) the costs of ammonia, lime, limestone, urea, dibasic  
10 acid, and catalysts consumed in reducing or treating emissions, and (b) the cost  
11 of emission allowances, as used, including allowance for SO<sub>2</sub>, NO<sub>x</sub>, mercury,  
12 and particulates" are now statutorily required to be recovered "as a separate  
13 environmental component of the overall fuel factor." In addition, the 2007  
14 amendments to the Fuel Cost Recovery Statute also provide a mechanism for  
15 other variable environmental costs to be recovered through the Company's  
16 Fuel Cost Factor, subject to Commission approval.

17 **Q. HOW WILL THESE CHANGES IMPACT THE CALCULATION OF**  
18 **THE COMPANY'S TOTAL FUEL COST FACTOR?**

19 A. The amendments to the Fuel Cost Recovery Statute effectively bifurcate  
20 the recovery of fuel cost into two separate components. The first component is  
21 comprised of what could be thought of as "Base", or traditional fuel costs, such  
22 as the cost of coal, gas, oil and nuclear fuel, fuel transportation, and fuel costs

1 related to purchased power. The second component is comprised of certain  
2 defined variable environmental-related fuel costs, such as emission allowances  
3 for SO<sub>2</sub> and NO<sub>x</sub> and reagents used to reduce or treat emissions such as  
4 ammonia, lime, limestone, urea and dibasic acid.

5 In compliance with the amended statute, the Company allocated the  
6 environmental-related fuel costs to rate classes using a demand allocation  
7 before it divided them by class-specific sales to arrive at the Environmental  
8 Fuel Cost Component for each class of service. This results in different  
9 Environmental Fuel Cost Components for the Company's five retail rate  
10 classes. These costs are then added to the "Base", or traditional, Fuel Cost  
11 Component to arrive at the Total Fuel Cost Factor by rate class.

12 **Q. IN SCE&G'S RECENT RATE CASE APPROVED IN DOCKET NO.**  
13 **2007-229-E BY ORDER NO. 2007-855, WERE THE COSTS OF THESE**  
14 **FUEL EXPENSES FOR ENVIRONMENTAL REAGENTS REMOVED**  
15 **FROM CONSIDERATION?**

16 **A.** Yes, they were. As explained in the testimony of Witness Sharon G.  
17 Scott who testified on behalf of the South Carolina Office of Regulatory Staff,  
18 the parties in the rate case agreed to decrease operating and maintenance  
19 expenses for the costs of environmental reagents. This adjustment was made  
20 by the parties in compliance with the recent amendments to the Fuel Cost  
21 Recovery Statute and was approved by the Commission as part of its overall



1 approval of the settlement in that case, deferring the consideration of these  
2 costs for rate treatment until this proceeding.

3 **Q. PLEASE PROVIDE FURTHER EXPLANATION FOR THE**  
4 **CALCULATION OF THE BASE COMPONENT OF THE FUEL COST**  
5 **FACTOR.**

6 A. Exhibit No. \_\_\_\_ (AWR-1), page 1 shows the actual totals for the Base  
7 Fuel Cost Components and over / under recovery of fuel revenue experienced  
8 by the Company for the months of February 2007 through January 2008, as  
9 well as the forecast for February, March, and April 2008. As shown on this  
10 exhibit, the Company has an actual under collection of \$28,744,188 as of  
11 January 2008. The forecasted balance at April 2008 is an under collection of  
12 \$12,484,557. Carrying costs have been included in these calculations pursuant  
13 to the provisions of SCPSC Order Numbers 2007-257 and 2006-235(A). Page  
14 2 of the first exhibit contains the Company's Base Fuel Cost Component  
15 forecast and projected recovery calculations by month for May 2008 through  
16 April 2009. This page reflects the monthly and cumulative over and under  
17 projected fuel cost collection expected by the Company using its requested  
18 Base Fuel Cost Component. This projection shows an under recovery of  
19 \$12,484,557 at April 2008 and a balance at period end as close to zero as  
20 possible.

21 Exhibit No. \_\_\_\_ (AWR-2) provides the calculation of the projected fuel  
22 component for the twelve-month period May 2008 through April 2009, as well

1 as the Company's recommendation for the Base Fuel Cost Component. For  
2 the twelve months May 2008 through April 2009 the Company projects a Base  
3 Fuel Cost Component of 2.641 cents per KWH.

4 **Q. PLEASE REFER TO EXHIBIT NO. \_\_\_\_ (AWR-3) THROUGH**  
5 **EXHIBIT NO. \_\_\_\_ (AWR-5) AND EXPLAIN HOW THESE EXHIBITS**  
6 **DETAIL THE CALCULATION OF THE ENVIRONMENTAL**  
7 **COMPONENT OF THE FUEL COST FACTOR BY RATE CLASS.**

8 A. Exhibit No. \_\_\_\_ (AWR-3) shows the actual total fuel-related  
9 environmental costs incurred from May 3, 2007 through January 2008, as well  
10 as the forecasted environmental costs for February, March, and April of 2008.  
11 The exhibit includes an adjustment of \$27,028,156 that is addressed and  
12 explained in the direct testimony of James E. Swan IV. With this credit of \$27  
13 million to the Company's environmental fuel costs for the period under review,  
14 an over collected balance of \$3,200,075 is projected at April 30, 2008. The  
15 exhibit also details forecasted fuel-related environmental costs for the months  
16 of May 2008 through April 2009, which total \$22,779,998.

17 Exhibit No. \_\_\_\_ (AWR-4) shows the allocation of total fuel-related  
18 environmental costs referred to in Exhibit No. \_\_\_\_ (AWR-3) to retail rate  
19 classes. This allocation is calculated using the Company's prior year peak  
20 demand allocator as specified by the Fuel Cost Recovery Statute.

21 Exhibit No. \_\_\_\_ (AWR-5) summarizes the calculation of the  
22 environmental component of the fuel factor for each rate class by using the

1 costs derived by Exhibit No. \_\_\_\_ (AWR-4) and dividing them by forecasted  
2 class-specific KWH sales for the period May 2008 through April 2009.

3 **Q. PLEASE DESCRIBE THE DEMAND FACTOR USED TO ALLOCATE**  
4 **ENVIRONMENTAL FUEL COSTS.**

5 A. The company uses the same four-hour-band Coincident Peak ("CP")  
6 allocator that has been approved by this Commission for the last 28 years and  
7 was most recently affirmed by Order No. 2007-855. The Summer 2006 peak  
8 shown in Exhibit No. \_\_\_\_ (AWR-4) occurred on August 3, 2006. The Summer  
9 2007 peak shown in the same exhibit occurred on August 10, 2007 and is  
10 currently the Company's historic peak.

11 **Q. BY WHAT PROCESS DO YOU DEVELOP YOUR PROJECTED FUEL**  
12 **COST FACTOR FOR SCE&G'S RATES?**

13 A. As Mr. Lynch indicates in his testimony, we receive the output from the  
14 PROSYM model from the Resource Planning Department which gives us the  
15 estimated sales and estimated fuel usage required to meet these sales by fuel  
16 type for each month during the forecast period. This data is loaded onto  
17 spreadsheets along with fuel ending inventories, forecasted fuel prices,  
18 emission allowances and information regarding operations to determine  
19 projected fuel costs for February, March and April 2008, as well as the twelve  
20 months ending April 2009.

21 **Q. WHAT ARE THE TOTAL FUEL COST FACTORS BEING PROPOSED**  
22 **BY THE COMPANY IN THIS PROCEEDING?**

1 A. For the Residential rate class, the Company proposes a Total Fuel Cost  
2 Factor of 2.742 cents per KWH. For the Small General Service rate class, the  
3 Total Fuel Cost Factor is 2.728 cents per KWH. For the Medium General  
4 Service rate class, the Total Fuel Cost Factor is 2.716 cents per KWH. For the  
5 Large General Service rate class, the Total Fuel Cost Factor is 2.685 cents per  
6 KWH. For the Lighting rate class, the Total Fuel Cost Factor is 2.641 cents  
7 per KWH. These calculations may be found on Exhibit No. \_\_\_\_ (AWR-6).

8 **Q. ARE THERE ANY OTHER MATTERS TO BE BROUGHT BEFORE**  
9 **THE COMMISSION IN THIS TESTIMONY?**

10 A. The Company is also submitting a proposed new tariff sheet entitled  
11 "Adjustment for Fuel and Variable Environmental Costs" which replaces the  
12 current tariff sheet entitled "Adjustment for Fuel Costs." This new tariff sheet  
13 includes changes mandated by the 2007 amendments to the Fuel Cost  
14 Recovery Statute as well as prior standards for calculating fuel cost as set forth  
15 in the statute. Additionally, the fuel rates set forth in this new tariff sheet are  
16 consistent with the calculated Base Fuel Cost components, the Environmental  
17 Fuel Cost components, and total Fuel Cost Factors. It is attached as Exhibit  
18 No. \_\_\_\_ (AWR-7).

19 **Q. WHAT REQUEST DOES THE COMPANY MAKE OF THE**  
20 **COMMISSION IN THIS PROCEEDING?**

21 A. The Company respectfully requests that the Commission approve the  
22 Base Fuel Cost Components, the Environmental Fuel Cost Components and



1 the Total Fuel Cost Factors for all customer classes for bills rendered on and  
2 after the first billing cycle of May 2008 and continuing through the billing  
3 month of April 2009. Further, the Company respectfully requests that the tariff  
4 sheet entitled Adjustment for Fuel and Variable Environmental Costs be  
5 approved for implementation by the Company for all customer classes for bills  
6 rendered on and after the first billing cycle of May 2008 and continuing  
7 through the billing month of April 2009.

8 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.** Yes.

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY  
BASE FUEL COSTS REPORT  
FEBRUARY, 2007 - APRIL, 2008**

			Actual							
			Feb, 2007	Mar, 2007	Apr, 2007	May, 2007	Jun, 2007	Jul, 2007	Aug, 2007	Sep, 2007
1. Fossil Fuel Costs			\$ 60,925,706	\$ 25,794,172	\$ 30,811,059	\$ 36,094,219	\$ 47,619,157	\$ 50,521,011	\$ 69,417,943	\$ 43,604,152
2. Nuclear Fuel Costs			\$ 1,736,466	\$ 2,098,661	\$ 2,016,733	\$ 2,088,005	\$ 2,006,792	\$ 2,092,712	\$ 2,090,899	\$ 2,025,795
3. Fuel Costs in Purchased Power and Interchange Received			\$ 2,473,285	\$ 12,008,107	\$ 10,226,146	\$ 10,655,845	\$ 11,235,691	\$ 12,597,234	\$ 13,341,997	\$ 11,000,019
4. Less: Fuel Costs in Intersystem Sales			\$ 5,721,653	\$ 2,254,395	\$ 2,096,472	\$ 3,403,311	\$ 6,684,685	\$ 6,296,189	\$ 10,172,933	\$ 5,952,989
5. Total Fuel Costs (Lines 1+2+3-4)			\$ 59,413,804	\$ 37,646,545	\$ 40,957,466	\$ 45,434,758	\$ 54,176,955	\$ 58,914,768	\$ 74,677,906	\$ 50,676,977
6. Total System Sales Excluding Intersystem Sales (KWH)			1,965,743,788	1,808,955,931	1,656,190,089	1,856,627,746	2,056,466,353	2,271,724,249	2,466,555,676	2,257,749,058
7. Total Fuel Cost Per KWH Sales			\$ 0.030225	\$ 0.020811	\$ 0.024730	\$ 0.024472	\$ 0.026345	\$ 0.025934	\$ 0.030276	\$ 0.022446
8. Less Base Fuel Cost Per KWH Included in Rates			\$ 0.02516	\$ 0.02516	\$ 0.02516	\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630
9. Fuel Adjustment Per KWH			\$ 0.00507	\$ (0.00435)	\$ (0.00043)	\$ (0.00183)	\$ 0.00005	\$ (0.00037)	\$ 0.00398	\$ (0.00385)
10. Retail KWH Sales			1,845,009,210	1,695,657,478	1,544,802,366	1,732,805,734	1,917,537,823	2,128,561,410	2,300,428,685	2,125,488,422
11. Over / Under Recovery Revenue			\$ 9,354,197	\$ (7,376,110)	\$ (664,265)	\$ (3,171,034)	\$ 95,877	\$ (787,568)	\$ 9,155,706	\$ (8,183,130)
12. Carrying Costs			\$ 83,424	\$ 85,021	\$ 84,694	\$ 88,870	\$ 84,110	\$ 72,454	\$ 62,510	\$ 55,911
13. Fixed Capacity Charges & Adjustments			\$ (1,497,419)	\$ (1,583,583)	\$ (1,583,583)	\$ (1,583,583)	\$ (1,566,255)	\$ (1,568,135)	\$ (1,583,583)	\$ (1,583,583)
14. Net Over / Under Recovery Revenue			\$ 7,940,202	\$ (8,874,672)	\$ (2,163,154)	\$ (4,665,747)	\$ (1,386,268)	\$ (2,283,249)	\$ 7,634,633	\$ (9,710,802)
15. Cumulative (Over) Under Balance	\$ 52,476,342		\$ 60,416,544	\$ 51,541,872	\$ 49,378,718	\$ 44,712,971	\$ 43,326,703	\$ 41,043,454	\$ 48,678,087	\$ 38,967,285

			Actual				Forecast		
			Oct, 2007	Nov, 2007	Dec, 2007	Jan, 2008	Feb, 2008	Mar, 2008	Apr, 2008
16. Fossil Fuel Costs			\$ 38,174,298	\$ 30,497,917	\$ 35,485,847	\$ 55,647,586	\$ 33,560,000	\$ 44,812,000	\$ 40,074,000
17. Nuclear Fuel Costs			\$ 2,053,539	\$ 1,987,939	\$ 2,056,011	\$ 1,572,228	\$ 1,899,000	\$ 2,031,000	\$ 1,702,000
18. Fuel Costs in Purchased Power and Interchange Received			\$ 10,269,447	\$ 10,313,110	\$ 9,665,125	\$ 12,615,545	\$ 11,873,000	\$ 4,094,000	\$ 6,518,000
19. Less: Fuel Costs in Intersystem Sales			\$ 3,817,176	\$ 5,686,154	\$ 6,843,030	\$ 7,116,242	\$ 4,975,000	\$ 3,977,000	\$ 4,030,000
20. Total Fuel Costs (Lines 1+2+3-4)			\$ 46,680,108	\$ 37,112,812	\$ 40,363,953	\$ 62,719,117	\$ 42,357,000	\$ 46,960,000	\$ 44,264,000
21. Total System Sales Excluding Intersystem Sales (KWH)			1,980,782,107	1,729,610,452	1,776,400,203	1,967,437,243	1,974,000,000	1,827,000,000	1,720,000,000
22. Total Fuel Cost Per KWH Sales			\$ 0.023567	\$ 0.021457	\$ 0.022722	\$ 0.031879	\$ 0.021457	\$ 0.025703	\$ 0.025735
23. Less Base Fuel Cost Per KWH Included in Rates			\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630	\$ 0.02630
24. Fuel Adjustment Per KWH			\$ (0.00273)	\$ (0.00484)	\$ (0.00358)	\$ 0.00558	\$ (0.00484)	\$ (0.00060)	\$ (0.00057)
25. Retail KWH Sales			1,863,010,635	1,617,769,209	1,659,161,496	1,826,063,399	1,858,000,000	1,710,000,000	1,612,000,000
26. Over / Under Recovery Revenue			\$ (5,086,019)	\$ (7,830,003)	\$ (5,939,798)	\$ 10,189,434	\$ (8,992,720)	\$ (1,026,000)	\$ (918,840)
27. Carrying Costs			\$ 47,923	\$ 37,045	\$ 31,296	\$ 22,946	\$ 17,000	\$ 11,000	\$ 6,000
28. Fixed Capacity Charges & Adjustments			\$ 3,237,972	\$ (1,564,953)	\$ (1,583,583)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)
29. Net Over / Under Recovery Revenue			\$ (1,800,124)	\$ (9,357,911)	\$ (7,492,085)	\$ 8,427,023	\$ (10,761,077)	\$ (2,800,357)	\$ (2,698,197)
30. Cumulative (Over) Under Balance			\$ 37,167,161	\$ 27,809,250	\$ 20,317,165	\$ 28,744,188	\$ 17,983,111	\$ 15,182,754	\$ 12,484,557

**Note:** Emission Allowance Costs are included in Fossil Fuel Costs for the months of February, 2007 - April, 2007

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY**  
**BASE FUEL COSTS REPORT**  
**MAY, 2008 - APRIL, 2009**

	Forecast					
	May, 2008	Jun, 2008	Jul, 2008	Aug, 2008	Sep, 2008	Oct, 2008
1. Fossil Fuel Costs	\$ 30,646,000	\$ 50,849,000	\$ 59,211,000	\$ 60,363,000	\$ 47,012,000	\$ 39,804,000
2. Nuclear Fuel Costs	\$ -	\$ 2,129,000	\$ 2,199,000	\$ 2,199,000	\$ 2,129,000	\$ 2,223,000
3. Fuel Costs in Purchased Power and Interchange Received	\$ 17,164,000	\$ 15,878,000	\$ 18,259,000	\$ 16,756,000	\$ 17,561,000	\$ 13,746,000
4. Less: Fuel Costs in Intersystem Sales	\$ 3,455,000	\$ 6,676,000	\$ 7,585,000	\$ 7,848,000	\$ 5,314,000	\$ 2,979,000
5. Total Fuel Costs (Lines 1+2+3-4)	\$ 44,355,000	\$ 62,180,000	\$ 72,084,000	\$ 71,470,000	\$ 61,388,000	\$ 52,794,000
6. Total System Sales Excluding Intersystem Sales (KWH)	1,854,000,000	2,181,000,000	2,404,000,000	2,417,000,000	2,293,000,000	1,923,000,000
7. Total Fuel Cost Per KWH Sales	\$ 0.023924	\$ 0.028510	\$ 0.029985	\$ 0.029570	\$ 0.026772	\$ 0.027454
8. Less Base Fuel Cost Per KWH Included in Rates	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641
9. Fuel Adjustment Per KWH	\$ (0.00249)	\$ 0.00210	\$ 0.00358	\$ 0.00316	\$ 0.00036	\$ 0.00104
10. Retail KWH Sales	1,728,000,000	2,040,000,000	2,249,000,000	2,268,000,000	2,164,000,000	1,809,000,000
11. Over / Under Recovery Revenue	\$ (4,302,720)	\$ 4,284,000	\$ 8,051,420	\$ 7,166,880	\$ 779,040	\$ 1,881,360
12. Carrying Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13. Fixed Capacity Charges & Adjustments	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)
14. Net Over / Under Recovery Revenue	\$ (6,088,077)	\$ 2,498,643	\$ 6,266,063	\$ 5,381,523	\$ (1,006,317)	\$ 96,003
15. Cumulative (Over) Under Balance	\$ 12,484,557	\$ 6,396,480	\$ 8,895,123	\$ 15,161,186	\$ 20,542,709	\$ 19,632,395

	Forecast					
	Nov, 2008	Dec, 2008	Jan, 2009	Feb, 2009	Mar, 2009	Apr, 2009
16. Fossil Fuel Costs	\$ 42,661,000	\$ 39,830,000	\$ 42,606,000	\$ 37,704,000	\$ 41,531,000	\$ 33,831,000
17. Nuclear Fuel Costs	\$ 2,148,000	\$ 2,223,000	\$ 2,223,000	\$ 2,003,000	\$ 2,223,000	\$ 2,148,000
18. Fuel Costs in Purchased Power and Interchange Received	\$ 12,587,000	\$ 13,200,000	\$ 15,228,000	\$ 13,914,000	\$ 12,534,000	\$ 13,755,000
19. Less: Fuel Costs in Intersystem Sales	\$ 7,704,000	\$ 8,643,000	\$ 7,099,000	\$ 6,986,000	\$ 5,530,000	\$ 6,218,000
20. Total Fuel Costs (Lines 1+2+3-4)	\$ 49,692,000	\$ 46,610,000	\$ 52,958,000	\$ 46,635,000	\$ 50,758,000	\$ 43,516,000
21. Total System Sales Excluding Intersystem Sales (KWH)	1,734,000,000	1,920,000,000	2,091,000,000	1,972,000,000	1,882,000,000	1,752,000,000
22. Total Fuel Cost Per KWH Sales	\$ 0.028657	\$ 0.024276	\$ 0.025327	\$ 0.023649	\$ 0.026970	\$ 0.024838
23. Less Base Fuel Cost Per KWH Included in Rates	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641	\$ 0.02641
24. Fuel Adjustment Per KWH	\$ 0.00225	\$ (0.00213)	\$ (0.00108)	\$ (0.00276)	\$ 0.00056	\$ (0.00157)
25. Retail KWH Sales	1,623,000,000	1,793,000,000	1,957,000,000	1,856,000,000	1,764,000,000	1,643,000,000
26. Over / Under Recovery Revenue	\$ 3,651,750	\$ (3,819,090)	\$ (2,113,560)	\$ (5,122,560)	\$ 987,840	\$ (2,579,510)
27. Carrying Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28. Fixed Capacity Charges & Adjustments	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)	\$ (1,785,357)
29. Net Over / Under Recovery Revenue	\$ 1,866,393	\$ (5,604,447)	\$ (3,898,917)	\$ (6,907,917)	\$ (797,517)	\$ (4,364,867)
30. Cumulative (Over) Under Balance	\$ 21,498,788	\$ 15,894,341	\$ 11,995,424	\$ 5,087,507	\$ 4,289,990	\$ (74,877)

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY  
CALCULATION OF BASE FUEL COST COMPONENT**

**1. Projected Data (May, 2008 - April, 2009)**

Cost of Fuel (000's)	\$ 654,440
System Sales (GWH)	24,423
Fuel Rate (Cents/KWH)	2.680

**2. (Over)/Under Collection (000's) through April, 2008**

\$ 12,485

South Carolina Retail Sales (GWH)	22,894
(Over)/Under Collection Rate (Cents/KWH)	0.055

**3. Base Fuel Cost Component (Cents/KWH)**

Projected Fuel Rate	2.680
Fixed Capacity Charges & Adjustments	<u>(0.094)</u>
Total Projected Fuel Rate	2.586
(Over)/Under Recovery Rate	<u>0.055</u>
Total Base Fuel Cost Component	<u><b>2.641</b></u>



**SOUTH CAROLINA ELECTRIC AND GAS COMPANY  
SUMMARY OF ENVIRONMENTAL FUEL COSTS  
MAY, 2007 - APRIL, 2009**

	Actual											Forecasted		Total Uncollected Costs
	May, 2007 <sup>1</sup>	Jun, 2007	Jul, 2007	Aug, 2007	Sep, 2007	Oct, 2007	Nov, 2007	Dec, 2007 <sup>2</sup>	Jan, 2008	Feb, 2008	Mar, 2008	Apr, 2008	@ 4/30/2008	
Environmental Fuel Costs														
1. SO2 Allowances	\$ 1,110,387	\$ 1,429,988	\$ 1,500,067	\$ 1,552,701	\$ 1,425,781	\$ 1,732,792	\$ 1,871,652	\$ 1,962,826	\$ 1,857,658	\$ 1,564,224	\$ 1,825,668	\$ 1,566,167	\$ 19,399,913	
2. NOx Allowances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3. Lime	\$ 382,213	\$ 378,464	\$ 327,806	\$ 384,404	\$ 364,958	\$ 395,135	\$ 404,623	\$ 243,229	\$ 603,582	\$ 306,000	\$ 306,000	\$ 230,000	\$ 4,328,414	
4. Ammonia	\$ 92,352	\$ 273,162	\$ 344,212	\$ 290,190	\$ 176,749	\$ 6,151	\$ -	\$ -	\$ 3,082	\$ 8,000	\$ 7,000	\$ 206,000	\$ 1,405,899	
5. Environmental Costs Recovered in Intersystem Sales	\$ (27,751)	\$ (45,559)	\$ (14,949)	\$ (9,011)	\$ (41,495)	\$ (74,696)	\$ (277,510)	\$ (236,607)	\$ (108,627)	\$ (179,200)	\$ (143,420)	\$ (145,320)	\$ (1,304,145)	
6. Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (27,028,156)	\$ -	\$ -	\$ -	\$ -	\$ (27,028,156)	
7. Net Environmental Costs	\$ 1,557,203	\$ 2,036,054	\$ 2,157,137	\$ 2,218,284	\$ 1,925,993	\$ 2,059,383	\$ 1,998,765	\$ (25,058,708)	\$ 2,355,695	\$ 1,699,024	\$ 1,995,248	\$ 1,855,847	\$ (3,200,075)	

	Forecasted											Total Costs From Forecast Period	
	May, 2008	Jun, 2008	Jul, 2008	Aug, 2008	Sep, 2008	Oct, 2008	Nov, 2008	Dec, 2008	Jan, 2009	Feb, 2009	Mar, 2009	Apr, 2009	Period
Environmental Fuel Costs													
8. SO2 Allowances	\$ 1,936,684	\$ 1,965,271	\$ 2,087,945	\$ 2,094,606	\$ 2,511,473	\$ 2,214,781	\$ 2,089,887	\$ 2,478,445	\$ 359,263	\$ 304,271	\$ 288,938	\$ 287,976	\$ 18,619,540
9. NOx Allowances	\$ 154,255	\$ 167,850	\$ 185,761	\$ 188,534	\$ 152,600	\$ -	\$ -	\$ -	\$ 44,900	\$ 35,177	\$ 39,883	\$ 37,351	\$ 1,007,111
10. Lime	\$ 306,000	\$ 306,000	\$ 306,000	\$ 306,000	\$ -	\$ -	\$ 153,000	\$ 306,000	\$ 308,655	\$ 299,641	\$ 308,957	\$ 180,810	\$ 2,782,063
11. Ammonia	\$ 297,750	\$ 348,000	\$ 350,000	\$ 346,000	\$ 177,000	\$ 5,000	\$ 41,450	\$ 79,900	\$ 361,606	\$ 334,524	\$ 306,241	\$ 278,773	\$ 2,926,244
12. Environmental Costs Recovered in Intersystem Sales	\$ (129,710)	\$ (245,190)	\$ (277,780)	\$ (287,210)	\$ (196,360)	\$ (107,640)	\$ (277,050)	\$ (310,720)	\$ (255,380)	\$ (179,200)	\$ (143,420)	\$ (145,320)	\$ (2,554,960)
13. Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14. Net Environmental Costs	\$ 2,564,979	\$ 2,541,931	\$ 2,652,926	\$ 2,647,930	\$ 2,644,713	\$ 2,112,141	\$ 2,007,287	\$ 2,553,625	\$ 819,064	\$ 794,413	\$ 801,399	\$ 639,590	\$ 22,779,998

<sup>1</sup> - Effective May 3, 2007, changes in SC law (Section 58-27-865) mandated that environmental costs incurred for reducing or treating emissions be included in fuel costs used in the fuel factor calculation

<sup>2</sup> - Adjustment for SCPSC Order No. 2008-49 (to be applied entirely to Retail)

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY**  
**ALLOCATION OF ENVIRONMENTAL FUEL COSTS TO RATE CLASSES**  
**MAY, 2007 - APRIL, 2009**

													Total Uncollected
Class	May, 2007	Jun, 2007	Jul, 2007	Aug, 2007	Actual				Forecasted				Costs
					Sep, 2007	Oct, 2007	Nov, 2007	Dec, 2007	Jan, 2008	Feb, 2008	Mar, 2008	Apr, 2008	@ 4/30/2008
1. Residential	\$ 685,792	\$ 896,678	\$ 950,003	\$ 976,932	\$ 848,207	\$ 906,952	\$ 880,256	\$ (11,739,306)	\$ 1,068,779	\$ 770,847	\$ 905,244	\$ 841,998	\$ (2,007,618)
2. Small General Service	\$ 274,535	\$ 358,956	\$ 380,303	\$ 391,083	\$ 339,553	\$ 363,069	\$ 352,382	\$ (4,699,458)	\$ 399,526	\$ 288,154	\$ 338,394	\$ 314,752	\$ (898,751)
3. Medium General Service	\$ 168,645	\$ 220,505	\$ 233,618	\$ 240,240	\$ 208,585	\$ 223,031	\$ 216,466	\$ (2,886,842)	\$ 250,410	\$ 180,606	\$ 212,095	\$ 197,277	\$ (535,364)
4. Large General Service	\$ 341,339	\$ 446,303	\$ 472,844	\$ 486,248	\$ 422,178	\$ 451,417	\$ 438,129	\$ (5,842,996)	\$ 503,412	\$ 363,081	\$ 426,384	\$ 396,595	\$ (1,095,066)
5. Retail Portion	\$ 1,470,311	\$ 1,922,442	\$ 2,036,768	\$ 2,094,503	\$ 1,818,523	\$ 1,944,469	\$ 1,887,233	\$ (25,168,602)	\$ 2,222,127	\$ 1,602,688	\$ 1,882,117	\$ 1,750,622	\$ (4,536,799)
6. Total	\$ 1,557,203	\$ 2,036,054	\$ 2,157,137	\$ 2,218,284	\$ 1,925,993	\$ 2,059,383	\$ 1,998,765	\$ (25,058,708)	\$ 2,355,695	\$ 1,699,024	\$ 1,995,248	\$ 1,855,847	\$ (3,200,075)

Class	Forecasted												Total Costs From Forecast Period
	May, 2008	Jun, 2008	Jul, 2008	Aug, 2008	Sep, 2008	Oct, 2008	Nov, 2008	Dec, 2008	Jan, 2009	Feb, 2009	Mar, 2009	Apr, 2009	
7. Residential	\$ 1,163,731	\$ 1,153,274	\$ 1,203,633	\$ 1,201,366	\$ 1,199,906	\$ 958,278	\$ 910,706	\$ 1,158,580	\$ 371,609	\$ 360,425	\$ 363,595	\$ 290,182	\$ 10,335,285
8. Small General Service	\$ 435,020	\$ 431,111	\$ 449,936	\$ 449,089	\$ 448,543	\$ 358,219	\$ 340,436	\$ 433,095	\$ 138,913	\$ 134,732	\$ 135,917	\$ 108,474	\$ 3,863,485
9. Medium General Service	\$ 272,657	\$ 270,207	\$ 282,006	\$ 281,475	\$ 281,133	\$ 224,521	\$ 213,375	\$ 271,450	\$ 87,067	\$ 84,446	\$ 85,189	\$ 67,988	\$ 2,421,514
10. Large General Service	\$ 548,136	\$ 543,211	\$ 566,930	\$ 565,863	\$ 565,175	\$ 451,365	\$ 428,957	\$ 545,710	\$ 175,034	\$ 169,766	\$ 171,259	\$ 136,680	\$ 4,868,086
11. Retail Portion	\$ 2,419,544	\$ 2,397,803	\$ 2,502,505	\$ 2,497,793	\$ 2,494,757	\$ 1,992,383	\$ 1,893,474	\$ 2,408,635	\$ 772,623	\$ 749,369	\$ 755,960	\$ 603,324	\$ 21,488,370
12. Total	\$ 2,564,979	\$ 2,541,931	\$ 2,652,926	\$ 2,647,930	\$ 2,644,713	\$ 2,112,141	\$ 2,007,287	\$ 2,553,625	\$ 819,064	\$ 794,413	\$ 801,399	\$ 639,590	\$ 22,779,998

Demand Allocation Factors <sup>1</sup>

	Summer, 2006 Coincident Peak		Summer, 2007 Coincident Peak	
	KW	CP %	KW	CP %
13. Residential	2,042,059	44.04%	2,163,867	45.37%
14. Small General Service	817,433	17.63%	809,051	16.96%
15. Medium General Service	502,335	10.83%	506,749	10.63%
16. Large General Service	1,016,465	21.92%	1,019,021	21.37%
17. Total	4,636,364		4,769,026	

<sup>1</sup> - For 2007, Costs are allocated on Summer, 2006 CP. For 2008 and 2009, Costs are allocated on Summer, 2007 CP

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY**  
**CALCULATION OF ENVIRONMENTAL FUEL COST COMPONENT FOR RATE CLASSES**  
**MAY, 2007 - APRIL, 2009**

<u>Class</u>		Projected Uncollected Env Fuel Costs @ 4/30/2008	Forecasted Environmental Fuel Costs from May, 2008 - Apr, 2009	Total Environmental Fuel Costs	Forecasted Sales by Class from May, 2008 - Apr, 2009	Environmental Fuel Cost Component for May, 2008 - Apr, 2009
		(\$\$\$)	(\$\$\$)	(\$\$\$)	(kWh)	(\$\$\$ / kWh)
1.	Residential	(2,007,618)	10,335,285	6,327,667	8,241,000,000	0.00101
2.	Small General Service	(898,751)	3,863,485	2,964,734	3,416,000,000	0.00087
3.	Medium General Service	(535,364)	2,421,514	1,886,150	2,503,000,000	0.00075
4.	Large General Service	(1,095,066)	4,868,086	3,773,020	8,500,000,000	0.00044

**SOUTH CAROLINA ELECTRIC AND GAS COMPANY  
CALCULATION OF TOTAL FUEL COST FACTORS BY CUSTOMER CLASS  
FOR THE PERIOD MAY, 2008 THROUGH APRIL, 2009**

Class	Cents / KWH		
	Base Fuel Cost Component (from Exhibit 2)	Environmental Fuel Cost Comp. (from Exhibit 5)	Total Fuel Costs Factor
Residential	2.641	0.101	2.742
Small General Service	2.641	0.087	2.728
Medium General Service	2.641	0.075	2.716
Large General Service	2.641	0.044	2.685
Lighting	2.641	-	2.641



## SOUTH CAROLINA ELECTRIC &amp; GAS COMPANY

## ELECTRICITY

## ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

RETAIL RATES  
(Page 1 of 2)

## APPLICABILITY

This adjustment is applicable to and is part of the Utility's South Carolina retail electric rate schedules.

The fuel and variable environmental costs, to be recovered in an amount rounded to the nearest one-thousandth of a cent per kilowatt-hour, will be determined by the following formulas:

$$F_C = \frac{E_F}{S} + \frac{G_F}{S_1}$$

$$F_{EC} = \frac{E_{EC} + G_{EC}}{S_2}$$

## Where:

$F_C$  = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one-thousandth of a cent.

$E_F$  = Total projected system fuel costs:

- (A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

## PLUS

- (B) Fuel costs related to purchased power such as those incurred in unit power and limited term power purchases where the fossil fuel costs associated with energy purchased are identifiable and are identified in the billing statement. Also, the cost of "firm generation capacity purchases," which are defined as purchases made to cure a capacity deficiency or to maintain adequate reserve levels. Costs of "firm generation capacity purchases" includes the total delivered costs of firm generation capacity purchased and excludes generation capacity reservation charges, generation capacity option charges and any other capacity charges.

## PLUS

- (C) Fuel costs related to purchased power (including transmission charges), such as short term, economy and other such purchases, where the energy is purchased on an economic dispatch basis, including the total delivered cost of economy purchases of electric power defined as purchases made to displace higher cost generation at a cost which is less than the purchasing Utility's avoided variable costs for the generation of an equivalent quantity of electric power.

Energy receipts that do not involve money payments such as diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

## MINUS

- (D) The cost of fuel recovered through intersystem sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as diversity energy and payback of storage energy are not defined as sales relative to this fuel calculation.

$S$  = Projected system kilowatt-hour sales excluding any intersystem sales.

$G_F$  = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in  $E_F$  and  $S$ .

$S_1$  = Projected jurisdictional kilowatt-hour sales, for the period covered by the fuel costs included in  $E_F$ .

$F_{EC}$  = Customer class variable environmental costs per kilowatt-hour included in base rates, rounded to the nearest one-thousandth of a cent.

Effective Upon Approval by the Public  
Service Commission of South Carolina

## SOUTH CAROLINA ELECTRIC &amp; GAS COMPANY

## ELECTRICITY

## ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

## RETAIL RATES

(Page 2 of 2)

$E_{EC}$  = The projected variable environmental costs including a) the cost of ammonia, lime, limestone, urea, dibasic acid, and catalysts consumed in reducing or treating emissions, plus b) the cost of emission allowances, as used, including allowances for SO<sub>2</sub>, NO<sub>x</sub>, mercury and particulates minus net proceeds of sales of emission allowances, and c) all other variable environmental costs incurred in relation to the consumption of fuel and air emissions caused thereby, including but not limited to environmental reagents, other environmental allowances, and emission related taxes. The costs related to subpart c) would require approval by the Commission. Any environmental related costs recovered through intersystem sales would be subtracted from the totals produced by subparts a), b), and c).

These environmental costs will be allocated to retail customer classes based upon the customer class firm peak demand allocation from the prior year.

$G_{EC}$  = Cumulative difference between jurisdictional customer class environmental fuel revenues billed and jurisdictional customer class environmental costs at the end of the month preceding the projected period utilized in  $E_{EC}$  and  $S_2$ .

$S_2$  = The projected jurisdictional customer class kilowatt-hour sales

The appropriate revenue-related tax factor is to be included in these calculations.

## FUEL RATES BY CLASS

The total fuel costs in cents per kilowatt-hour by customer class as determined by the Public Service Commission of South Carolina in Order No. \_\_\_\_-\_\_\_\_ are as follows for the period May, 2008 through April, 2009:

Customer Class	$F_C$ Rate	+	$F_{EC}$ Rate	=	Total Fuel Rate
Residential	2.641		0.101		2.742
Small General Service	2.641		0.087		2.728
Medium General Service	2.641		0.075		2.716
Large General Service	2.641		0.044		2.685
Lighting	2.641		0.000		2.641

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SC PUBLIC SERVICE  
COMMISSION

**DIRECT TESTIMONY OF  
ROBERT M. FOWLKES  
ON BEHALF OF  
SOUTH CAROLINA ELECTRIC & GAS COMPANY  
DOCKET NO. 2008-2-E**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND  
POSITION WITHIN SOUTH CAROLINA ELECTRIC AND GAS  
COMPANY (SCE&G).**

A. My name is Robert M. Fowlkes. My business address is P.O. Box 88, Jenkinsville, South Carolina 29065. I am employed by SCE&G as the General Manager of Engineering at the Virgil C. Summer Nuclear Station (VCSNS or VC Summer).

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND  
PROFESSIONAL EXPERIENCE.**

A. I received a BS degree in Engineering Science from Tennessee Technological University (Cookeville, TN) in 1976 and a MS degree in Nuclear Science and Engineering from Virginia Tech (Blacksburg, VA) in 1979. I obtained a Senior Reactor Operator license at VCSNS in 1983.

I have been the engineering general manager at VC Summer for four years. I was the operations manager for five years prior to my current assignment, and have served in various roles in the operations, engineering, and licensing departments since joining the company in 1980. I worked at Combustion Engineering (Windsor, CT) for two years in the set-point

1 analysis group for operating nuclear power plants prior to working for  
2 SCE&G.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. The purpose of my testimony is to review the operating performance  
5 of VCSNS during the period from February 1, 2007 through January 31,  
6 2008.

7 **Q. WHAT ARE YOUR OBJECTIVES IN THE OPERATION OF**  
8 **VCSNS?**

9 A. Our primary objective at VCSNS is always safe operation. We also  
10 strive for excellence in all phases of operation of the facility. The station's  
11 key focus areas of SAFETY, outage performance, equipment reliability,  
12 and constant improvement have facilitated the station's good performance  
13 through enhanced alignment of the organization. Our business objectives  
14 are focused on maintaining a competitive production cost for the generation  
15 of electricity using nuclear fuel.

16 **Q. WHAT HAS BEEN THE COMPANY'S EXPERIENCE WITH THE**  
17 **PERFORMANCE OF THE VCSNS?**

18 A. We continuously meet or exceed all Nuclear Regulatory  
19 Commission (NRC) requirements and Institute of Nuclear Power  
20 Operations (INPO) standards. VCSNS has performed well during the  
21 period from February 1, 2007 through January 31, 2008. Consistent with



1 the provisions of Section 58-27-865 of the South Carolina Code of Laws, as  
2 amended, VC Summer's net capacity factor based on reasonable excludable  
3 nuclear system reductions during the review period was 101.2% with a  
4 gross generation output of 8,630,460 MWH's.

5 **Q. HAS VCSNS EXPERIENCED ANY OUTAGES DURING THE**  
6 **REVIEW PERIOD?**

7 A. Yes, VCSNS has experienced the following:

- 8 • Reactor power was reduced to 90% on 02/02/2007 to repair a leak in  
9 the "D" feedwater booster pump outboard seal replacement. The  
10 unit was shut-down on 02/05/2007 for a leak on the booster pump  
11 recirculation line when the pump was returned to service following  
12 the seal replacement. The unit returned to full power operation on  
13 02/09/2007 following the leak repair.
- 14 • Reactor power was reduced to approximately 90% on 04/27/2007 to  
15 replace the "D" feedwater booster pump inboard seal. The unit  
16 returned to full power operation on 05/02/2007 following the seal  
17 replacement.
- 18 • Reactor power was reduced to 90% on 06/22/2007 to repair a steam  
19 leak on the "A" feedwater booster pump. A seal replacement was  
20 also performed while the pump was removed from service. The unit  
21 returned to full power operation on 06/29/2007.

- The unit was shut-down on 01/24/2008 to repair the “C” feedwater flow control valve. The shutdown was extended to repair the “B” circulating water pump motor. The plant was returned to low power operations beginning on 02/01/2008 and to full power operation on 02/02/2008.

**Q. WHEN WILL THE NEXT REFUELING OUTAGE OCCUR?**

A. Refueling outages are scheduled every 18 months to replace depleted fuel assemblies. Simultaneously, maintenance and testing that cannot be done with the plant on-line is conducted. Our next refueling outage will be Refuel 17 starting on April 25, 2008 with a planned duration of 37 days. Major activities include weld overlay repairs for the dissimilar metal welds on the reactor coolant system pressurizer, repairs to the base of the main generator and other plant modifications.

**Q. PLEASE EXPLAIN THE ROLES OF INPO AND THE NRC WITHIN THE NUCLEAR INDUSTRY AND DESCRIBE ANY RANKINGS RECEIVED BY VCSNS FROM THOSE AGENCIES.**

A. INPO is a nonprofit corporation established by the nuclear industry to promote the highest levels of nuclear safety and plant reliability. INPO promotes excellence in the industry in the operation of nuclear electric generating plants. For the applicable reporting period, INPO rated

1 VCSNS's overall performance as exemplary which is the highest rating  
2 awarded.

3 The NRC is responsible for the licensing and oversight of the  
4 civilian use of nuclear materials in the United States. The NRC has  
5 reported that VCSNS operated in a manner that preserved public health and  
6 safety and fully met all cornerstone objectives. During the reporting  
7 period, the NRC implemented no supplemental inspections beyond the base  
8 inspection scope.

9 **Q. WHAT IS THE SPENT FUEL STORAGE CAPABILITY FOR THE**  
10 **STATION AND WHAT IS THE PLAN FOR DEVELOPMENT OF A**  
11 **DRY CASK STORAGE FACILITY?**

12 A. The station has sufficient capacity for spent fuel storage in the spent  
13 fuel pool through the 23rd refueling outage in 2017. This allows capacity  
14 for a full core off-load in addition to the spent fuel stored in the pool. The  
15 plant is already developing plans for the construction of a dry cask storage  
16 facility that will need to be in service by 2015.

17 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

18 A. Yes